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ABSTRACT

This health education guide for grade eight is divided into six sections. A statement of the sub-goal for each section prefaces an outline for achieving that goal: (1) social-emotional well-being: to enhance self-awareness and increase skills that promote personal development and successful relationships; (2) physical well-being: to increase awareness about body systems and adopt lifestyle practices that promote and maintain physical well-being; (3) nutrition: to develop proficiency in making food choices that maintain and promote well-being; (4) dental health: to develop proficiency in applying dental health concepts, attitudes and skills that maintain and promote dental well-being; (5) safety: to practice safety and survival procedures that promote individual and community well-being; and (6) environmental health: to understand the importance of making responsible lifestyle decisions regarding disease, environmental factors and community health resources. The outline of each section includes objectives for students with a variety of activities from which to choose, and suggestions for the teacher. (JD)

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1983

health: grade eight

interim guide

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social-emotional well-being

SOCIAL-EMOTIONAL WELL-BEING

SUB-GOAL: To enhance self-awareness and increase skills that promote personal development and successful relationships.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
1.0 Personal Development Students should be able to:		
1.1 Recognize the many factors that influence self-concept.	List and discuss factors that influence self-concept.	Self-concept is the individual's total perception of himself/herself in the world (how he/she feels about self). Heredity, personal experiences and events, significant people, age and development influence self-concept. Self-concept evolves as one grows and as the world changes. Each person should be able to answer: . Who am I or how do I see myself? . What can I do? . How do I relate to people? . How do others see me?
	List and discuss significant persons and life events that have influenced self-concept.	Give personal examples, such as a special trip or an accident from your past. Discuss how events and/or persons have influenced you. Students should have the right to remain silent.
	Formulate a class list of significant life events and people that affect	

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	adolescents and discuss how each factor influences self-concept.	
1.2 Describe how self-knowledge contributes to a self-concept. (OPTIONAL)	List and substantiate capabilities, skills, strengths and weaknesses that describe oneself. Draw an art form or write a poem to illustrate knowledge of attributes that influence self-concept. Prepare an advertisement or design a t-shirt that illustrates personal strengths, skills, attributes.	Encourage students to justify the inclusion of each capability, skill, strength and weakness.
2.0 Relationships Students should be able to:		It is advisable to teach objectives 2.2-2.5 from grade seven to provide students with assertive skills.
2.1 Appreciate the role of assertive behavior.	Describe common situations where assertive behavior can be used and discuss the benefits of being assertive.	Some examples to suggest are: . giving and receiving compliments . acknowledging criticism or an insult . saying "No"

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. giving criticism/advice . asking for clarification . speaking up <u>Benefits of Being Assertive</u> . personal satisfaction . increased self-worth . honesty . more control over your life . increased ability to exercise your rights and beliefs . respect from others . increased success . reduced stress when handling conflicts
	Identify assertive and non-assertive behavior in case studies.	Define assertive, passive and aggressive behavior. Reproduce worksheet from <u>Teaching Aids</u>, have students read "Assertive Behavior" and then complete the worksheet. Have students identify types of behavior from case studies and discuss the value of being assertive and its relationship to a positive self-concept. Calgary Board of Education, <u>Self Concept</u>, Junior High, 7, 8, 9 (Calgary, AB: The Author, 1979), Grade 8, Lesson 5.
2.2 Practice assertive behavior to resolve conflicts.	Write a role play or scenario illustrating the use of assertive behavior, and act	Complete the following scenario. Students role play the situation, using assertive behavior that deals with the problem appropriately.

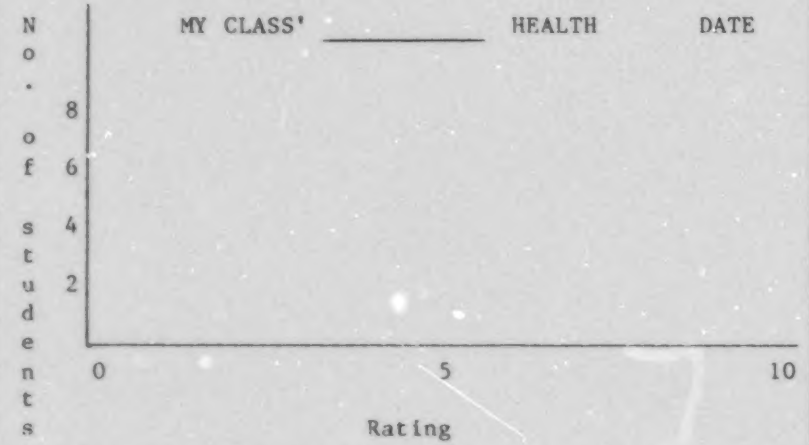
OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	out how to deal with the problems appropriately.	"You are standing in line for a movie. A stranger cuts in line in front of you."
2.3 Identify important qualities of a friend.	List and discuss important characteristics of a friend.	Introduce this section by discussing that we form many types of relationships with others. No two relationships are the same. We initiate relationships for different reasons and friends have different qualities.
	Brainstorm for the qualities of a friend and make a class list on the board.	
	Write a statement about a friend or select five to ten characteristics and rank order them from most to least important.	Ask students to discuss why special characteristics of a friend are important. See Teaching Aids for worksheet, "Friendship Qualities Checklist" and "Suggested Characteristic List," Calgary Board of Education, Interpersonal Relationships, Junior High, 7, 8, 9 (Calgary, AB: The Author, 1982), Grade 8, Lessons 1 and 2.
		Point out that everyone has special attributes that contribute to friendship.
	Describe types of friends, and list qualities that distinguish different friends.	Friends can be: . relatives . close . casual . of different cultural groups . of different ages . of the same or opposite sex
2.4 Identify reasons for belonging to a group.	Describe different types of groups and the benefits of belonging to each.	Discuss the ways that peer groups meet the needs of adolescents.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Make a list of groups that you belong to and discuss responsibilities of being a member of a group. Write several paragraphs each about "A Group I Belong To . . ."	Make a class list of all groups to which students belong. Prepare an overhead or worksheet and brainstorm for responsibilities and skills of a successful group member. Review individual responsibilities that enhance groups. See grade seven, section 1.0. Discuss the importance and kinds of groups that adolescents belong to and their relationship to adolescent life stage tasks. See Teaching Aids for Background Essay, Calgary Board of Education, Interpersonal Relationships, Junior High, 7, 8, 9 (Calgary, AB: The Author, 1982), Grade 8, Lesson 6. Distinguish between "peer" and "group" relationships. Explain that peer relationships are interpersonal connections you have with other people who are of the same age and interests, and who are in the places that you go. Discuss whether or not all members of groups are friends. Explain that when you join others to do something, you become part of a group relationship. As a group member, you influence each other and should assume responsibility.
	Complete a crossword puzzle on peer groups and friendship.	Assign crossword puzzle in Teaching Aids, "Peer Group Crossword Puzzle Activity Sheet," Calgary Board of Education, Interpersonal Relationships,

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Junior High, 7, 8, 9 (Calgary, AB: The Author, 1982), Grade 8, Lesson 6. Post answers to puzzle.
2.5 Know how to facilitate boy-girl conversations.	Discuss feelings on initiating conversations with someone of the opposite sex. Examine reasons for having difficulty in initiating, sustaining and terminating conversations with members of the opposite sex. Describe how an individual can initiate a conversation with someone of the opposite sex.	Review grade seven objective 2.1: initiating, sustaining and closing conversations. See grade seven, 2.1 Teacher Notes.
2.6 Identify common boy-girl social activities.	List some social activities that boys and girls do together.	
2.7 Identify dating relationships, expectations and responsibilities. (OPTIONAL)	Discuss reasons for dating and expectations of dating partners.	Arrange students in small groups and select a recorder. Students are to brainstorm their expectations of a date. Have them consider: . the kind of activities appropriate for a date . the kind of behavior they expect . the responsibilities of his/her partner and parents Recorder will present findings on board. With the class, discuss the findings of each group.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Calgary Board of Education, Interpersonal Relationships, Junior High, 7, 8, 9 (Calgary, AB: The Author, 1982), Rationale "Adolescents and Relationships.
3.0 Promoting Positive Lifestyle Practices Students should be able to:		
3.1 Assess personal social and emotional well-being status.	Rate personal social well-being and emotional well-being, and justify both ratings.	Review the importance of emotional and social well-being to health. Emotional health can be described as "accepting thoughts and feelings about ourselves." Social health can be described as "relating to others." Have each student indicate both his/her social and emotional levels of well-being on continuums of 1 to 10. My _____ Health Date _____ 0 5 10

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Factors that influence my rating are: _____ _____ _____ _____ Students may be asked to do one or more of the following: . identify positive and negative factors . write several paragraphs to describe social and/or emotional health and how it is influenced
	Prepare class profiles of both social and emotional well-being and justify.	The teacher can obtain a class profile on both health dimensions. Poll all students' ratings and make a bar graph, similar to the following, to illustrate the social and emotional status of reasons for ratings. Discuss and summarize. Review the concept of health as a fluctuating quality of life in the five dimensions of well-being, affected by one's environment, level of development and personal experiences.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		 Factors that influence the class' ratings are: _____ _____ _____ _____
3.2 Propose a plan of action to improve social and/or emotional well-being.	Using either the social or emotional ratings from 3.1, select one factor that needs improvement, and outline strategies to effect improvement on health and lifestyle.	Discuss the terms, "total health" and "lifestyle." Use the decision-making process for this activity. This exercise could be used to facilitate changes for more than one reason (e.g., weakness, strength) identified in 3.1 Teacher Notes.

physical well-being

PHYSICAL WELL-BEING

SUB-GOAL: To increase awareness about body systems and adopt lifestyle practices that promote and maintain physical well-being.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		In this unit, students learn more about themselves as they study the skeletal and muscular systems--their purpose, importance, structure and function, malfunction and care.
1.0 Skeletal System Students should be able to:		
1.1 Investigate the nature of bones of the skeletal system.	Investigate the effect of a weak acid on a bone.	The skeletal system supports, protects, and allows for body movement. Students will learn how to protect this system in an effort to maintain good health. Soak a chicken bone in vinegar for several days. Compare with a second bone that has not been treated with vinegar. A hard boiled egg can be substituted. Minerals precipitate out, leaving the bone or egg rubbery.
	Observe the characteristics of fresh bones.	Have students bring some bones to class; i.e., knuckle, shank. Characteristics to discuss: . hard

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. light . marrow in center Explain that red blood cells are produced in the marrow of long bones.
	Investigate the inside of a bone.	Explain that the inside of a bone is spongy and is made of bone bars which make the bone strong and light. They reinforce the outside of the bone. Exercise increases the amount of bars. Compare a chicken and beef bone. Ask: . What is the effect of exercise on bones? (stronger and give more support) . What minerals help strengthen bones? (calcium and phosphorus) . What food group is rich in calcium and phosphorus? . Why are strong bones important to health? (to support body, to resist breaking, to protect parts of body and to facilitate movement)
	Describe the activities that occur within bones.	Bring a fresh bone from a store for study. Discuss the following: . Red blood cells are produced in red marrow. . Fat is stored in yellow marrow. . Platelets are produced in red marrow. . Small openings in bones protect blood vessels that transport blood cells. . Certain white blood cells are produced in bones. . Bone marrow transplants are becoming more common

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		in treating cancer of the bone. Bone marrow punctures are performed on the sternum and some long bones to check blood cell formation.
1.2 Know the major bones of the body.	Cut out, assemble and name the major bones of the skeleton.	Have students find out the number of bones in the human body.
	Match the common and scientific names of major bones of the body.	See skeleton puzzle in Burt, J. J., L. B. Meeks and S. M. Pottebaum, Toward a Healthful Lifestyle (Belmont, CA: Wadsworth, 1979). ISIS, Keeping Fit (Lexington, MA: Ginn, 1977), p. 31.
	Group the major groups of bones of the body into two categories.	Borrow a skeleton from a science lab or use large diagrams. Explain that major groups of bones fall into two categories: . Axial Skeleton (80 bones) - skull, rib cage, back bone . Appendicular Skeleton (126 bones) - shoulders, arms, hips, legs Bones could be classified as being short, long, flat, irregular.
	Identify mystery bones.	Bring a box of a variety of bones to class. Encourage speculation and inference about each bone.

<table>
<tr><th>OBJECTIVES</th><th>SUGGESTED STUDENT ACTIVITIES</th><th>TEACHER NOTES</th></tr>
<tr><td>1.3 Recognize the variety and diversity of function in bones.</td><td>Using a skeleton or a large diagram, select the bone of the body that is longest, strongest and heaviest.</td><td>Ask:

. What is the name of this bone? (femur)
. What is its function? (supports body mass)
. Does it belong to the axial or appendicular skeleton? (appendicular)

Ask the students what the advantage is of so many bones in the foot/hand.</td></tr>
<tr><td></td><td>Using a skeleton or a large diagram, identify the number of bones in the upper and lower leg or arm and calculate the percentage of the skeleton involved in the legs/arms.</td><td>Diagrams of leg/arm are found in Scarrow, H. R., Bodyworks (Toronto, ON: Globe Modern Press, 1981).</td></tr>
<tr><td>1.4 Recognize the diversity of funtion of joints. (OPTIONAL)</td><td>Define a joint and locate the major types of joints and their functions.</td><td>There are 29 bones per leg and 206 bones in the entire body. Explain that joints are points where bones meet, and allow the skeleton to be flexible.

<table><tr><th>Types of Joints</th><th>Location</th><th>Function</th></tr><tr><td>gliding</td><td>wrist, ankle</td><td>movement, support</td></tr><tr><td>immovable</td><td>skull</td><td>protection</td></tr><tr><td>hinge</td><td>elbow, knee finger</td><td>opens and closes - flexibility</td></tr></table></td></tr>
</table>

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		<table><tr><th>Types</th><th>Location</th><th>Function</th></tr><tr><td>ball and socket</td><td>shoulder, hip</td><td>support, movement</td></tr><tr><td>slightly movable</td><td>spinal column</td><td>support, movement</td></tr><tr><td>pivot</td><td>skull, top spinal cord</td><td>support, movement</td></tr></table>
	Distinguish between tendons, ligaments and cartilage.	Tendons attach muscles to bones. Ligaments attach bones to bones and hold bones together at joints. Cartilage is support material found between or at the ends of bones for a cushioning effect. Have students observe a chicken carcass.
1.5 Research common skeletal and joint diseases or disorders and their effects on health and lifestyle.	Study common skeletal and joint diseases or disorders of youth and propose how health and lifestyle might be affected.	Some examples are: . fractures . dislocations . sprains and strains . arthritis . gout . disease (polio, gout, scoliosis) . bunions . slipped disk

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	See a film on a common skeletal disease or disorder and describe how it affects health and lifestyle of youth.	
Muscular System		Muscles and bones work together to move the body, give it support and structure, and provide energy for body work.
1.6 Know the major muscle groups and their functions.	Observe a chart, diagram or film to locate, name and describe the function of major muscle groups. Complete a chart of the action produced by common pairs of muscles.	Have students complete paired muscle movements on a chart.

Muscle Pair	Movements
Biceps-Triceps	raises forearm straightens elbow
Deltoid-latissimus dorsi	_____
Rectus femoris-gluteus maximus	_____
Gastrocnemius-tibialis anterior	_____

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Adapted from: ISIS, Keeping Fit (Lexington, MA: Ginn, 1973), pp. 34-35.
	Investigate the action of muscles moving a bone.	Ask the students to raise and lower the lower arm. Ask: . What do you feel happening to the muscles in the upper arm as the arm is raised? (biceps of upper arm contract and the arm moves up) . What do you feel happening to the muscles on upper arm as the arm is lowered? (triceps at back of upper arm contract and arm moves down)
1.7 Identify common muscular disorders and how they affect health and life-style.	List and describe common muscle disorders and injuries and how they affect youth.	For example: . muscle soreness . muscle pulls or tears . muscle cramp . shin splints . bruises
2.0 Keeping Fit Students should be able to:		
2.1 Demonstrate good posture and body mechanics.	Design a checklist to evaluate good posture and substantiate each statement.	Four reminders: stand tall, sit tall, walk tall, think tall.
	Practice correct posture to avoid and reduce common postural defects of youth.	Explain that good posture is related to efficient musculo-skeletal functioning. Common postural defects of youth are discussed in grade 7 unit.

<table>
<tr><th>OBJECTIVES</th><th>SUGGESTED STUDENT ACTIVITIES</th><th>TEACHER NOTES</th></tr>
<tr><td></td><td></td><td>. round shoulders
. slumped standing
. abdominal protrusion
. sunken chest; head forward
. hyper-extended knees
. scoliosis, lordosis, kyphosis</td></tr>
<tr><td>2.3 Know how to care for common musculo-skeletal injuries.</td><td>List common musculo-skeletal injuries and research how to care for a variety of musculo-skeletal injuries.</td><td>Have small groups of students research how to take personal responsibility in caring for musculo-skeletal injuries. Examples are:

. muscle soreness
. muscle pulls, tears
. bruises
. cramps
. sprains, strains
. shin splints
. head or spine injuries
. fractures</td></tr>
<tr><td>2.3 Propose measures that prevent musculo-skeletal injury.</td><td>Analyze how common musculo-skeletal injuries could be prevented.</td><td>Have students complete the following chart.

<table><tr><th>Hazards</th><th>Risks</th><th>Consequences (Injuries)</th><th>Care and Prevention</th></tr><tr><td>cool weather</td><td>no warm-up before track event or game</td><td>muscle pull</td><td>warm-ups, proper clothing</td></tr><tr><td>-----</td><td>------</td><td>shin splint</td><td>------</td></tr></table></td></tr>
</table>

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Demonstrate how good posture is applied in activities of daily living.	See Teaching Aids for good posture positions. Examples are: Endurance: carrying a back pack 5 km; shoveling snow; climbing stairs Strength: lifting a back pack onto the back; batting a ball; kicking a football; climbing a rope
3.0 Promoting Positive Lifestyle Practices Students should be able to: 3.1 Assess personal physical fitness.	Rate personal physical fitness or musculo-skeletal status on a scale of 1-10. Substantiate by listing factors that influence rating.	My Physical Fitness Date _____ 0 1 2 3 4 5 6 7 8 9 10

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		List factors that influence rating: 1. 2. 3. Factors that contribute to rating should be considered from these categories: . environment . heredity . lifestyle behavior . health care organization
	Apply the checklist developed to evaluate posture.	This activity was deccribed in objective 2.1.
3.2 Recognize community supports that influence personal fitness.	Describe a variety of services in the community that influence physical fitness.	
	List health workers whose role is related to fitness.	

Community Service	Availability		
	Frequent	Sometimes	Rare

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
3.3 Propose goals and/or a plan of action to maintain and/or improve optimal fitness.	Write goal statements and propose a plan of action to improve lifestyle and health related to fitness and/or posture. Make goal statements to promote musculo-skeletal fitness.	Encourage students to develop a plan using this guideline: . State problems (using objective 3.1 as a guide). . List alternatives. . Weigh pros and cons for each alternative. . Select the best alternative. Write goals. Outline a plan. . Try out the plan for a period of time. . Evaluate it.

nutrition

NUTRITION

SUB-GOAL: To develop proficiency in making food choices that maintain and promote well-being.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
1.0 Food This concept has been developed in earlier grades. No activities have been designed from grade five to grade nine for this section.		Teachers are encouraged to use one or more of the following suggestions to increase their background in nutrition: • Health Education Methods for Elementary Teachers: Background Reading (Nutrition section) available from Department of Education Library • Attend an in-service: Energetics 7-9, sponsored by Manitoba Milk Producers' Marketing Board • Canada's Food Guide Handbook 1982. Health and Welfare Canada, Home Economics Directorate, Health Promotion Branch, Department of Health, 880 Portage Avenue, Winnipeg Correlate this unit with nutrition studies in other disciplines to reinforce basic nutrition principles; e.g., Home Economics.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
2.0 Food Classification Students should be able to:		
2.1 Investigate the energy content in foods.	Calculate the stored energy of a known mass of food.	A simple experiment which emphasizes the energy content is described in the Teaching Aids, "Energy in Foods is Measureable." One Kilocalorie is the amount of energy required to raise the temperature of 1 litre or 1 kilogram of water 1°C. The Kcal is the term used in nutrition tables to describe food energy in a food item. 1 Kcal is equivalent to 4.2 Kilojoules. For example, one slice of bread (293 KJ) = 70 Kcal.
	Discuss the energy value of the three main nutrients.	Carbohydrates - approximately 4 Kcal/g (17 KJ) Proteins - approximately 4 Kcal/g (15 KJ) Fats - approximately 9 Kcal/g (37 KJ) See Nutrition Tables for caloric values of specific foods. For example: 125 mL of tomato juice contains 11 g of carbohydrates or 11 g x 4 Kcal/g = 44 Kcal. Source: Nutrient Value of Some Common Foods (Health and Welfare Canada, 1979).
2.2 Know the concept of energy balance.	Define these terms: food energy, basal needs, energy	Food energy: energy that comes from carbohydrates, proteins, and fats

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	intake, energy output, weight loss, energy balance.	Basal needs: energy used to keep the body functioning when at rest. This varies according to age, sex, body size Metabolic or basal function: includes breathing; digestion; circulation; kidney, liver, and nervous functioning; synthesis, cellular repair, cellular reproduction, defence of the body Energy intake: ingestion of foods with energy value Energy output: use of energy to maintain the body at rest (basal needs) and to provide energy for activities of living Caloric output = (basal needs) + (daily activities)
	Write a brief description of energy balance, relating intake and output.	Explain that energy balance occurs when energy intake is in balance with energy output. Energy balance: Intake = Output See Teaching Aids for diagrams of weight loss and weight gain from Energetics (Manitoba Milk Producers' Marketing Board), Sections I to IV.
2.3 Recognize factors that influence energy needs.	Justify why energy needs vary with given situations.	Have students identify factors that determine basal needs for the following four cases: . A large boy and a small boy of the same age (the larger boy has higher basal needs due to larger body size).

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. A 13-year-old girl and a 40-year-old woman (the 13-year-old girl has higher basal needs because her body is still growing). . A 25-year-old woman and a 25-year-old man (the 25-year-old man has higher basal needs because of greater body mass, that is, muscle). Note: Pretest students' understanding of this section. If understanding is good, proceed to section 3.0.
2.4 Know how to classify foods.	List and classify twenty favorite food items.	Have students use references to aid them in classifying favorite foods into the four food groups and extras.
	Match foods to appropriate food groups.	Prepare color-coded flash cards representing the four food groups. Mount single item foods onto poster cards and ask students to classify foods into the correct food group by holding up the appropriate card. . Milk and Milk Products - blue . Breads and Cereals - orange . Fruits and Vegetables - green . Meat, Fish, Poultry and Alternates - red . Extras - thumbs down
2.5 Identify the major nutrients and their roles in health.	Select the six major classes of nutrients and describe the functions of each.	See Teaching Aids for "Major Nutrient Classes in Canada's Food Guide."
	Match major nutrients with related functions.	The six major classes are: vitamins, minerals, water, protein, fat, carbohydrates.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Write a short description of major nutrients and their roles in the body.	
2.6 Recognize some important vitamins and minerals that regulate body processes.	List the important vitamins and minerals according to Canada's Food Guide, needed to regulate normal body processes.	
2.7 Identify the important nutrients within each food group.	Discuss the important nutrients within each food group.	Have students make a copy of a chart in their notebook for future reference. See Teaching Aids for a chart illustrating the "Important Nutrients in Canada's Food Guide" by food group categories.
	Select an important nutrient and identify several excellent food sources for that nutrient.	The important nutrients are: . protein . vitamin A . carbohydrates . protein . calcium . vitamin C . B vitamins . B vitamins . riboflavin . iron . iron . vitamin A
	Review twenty favorite foods list from 2.4; select 3-5 foods and research the important nutrients for each.	

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
3.0 Food Selection Students should be able to:		
3.1 Know the relationship of energy intake to weight control.	Record two days' food intake and analyze foods as to caloric intake. Compare intake in Kcal to students' requirements by age, sex, height and mass. Describe findings.	Analysis should be done for a weekday and a weekend day. Use Food Record in Teaching Aids for recording intake. See Teaching Aids for chart describing age, sex, height, weight, Kcal/kg. Source: Recommended Nutrient Intakes for Canadians (Health and Welfare Canada, 1982).
	Record and analyze two days' food intake for extras, food balance, high or low energy foods.	Have the students identify: . the number and type of extras consumed (sweet, salty, fat) . food choices as high or low energy content foods See Teaching Aids for "Get to Know High and Low Calorie Foods," Recommended Nutrient Intakes for Canadians (Health and Welfare Canada, 1982). Note: Sex, age, height, weight and activity level influence energy requirements.
3.2 Know the relationship of daily activities to weight control.	List a variety of types of activities that you enjoy and classify as light, moderate, or vigorous energy-spenders.	

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		<table><tr><th>Time of Day</th><th>Type of Activities</th><th>High</th><th>Mod.</th><th>Light</th></tr><tr><td>7:15-7:30</td><td>getting up washing dresing</td><td></td><td></td><td></td></tr><tr><td>7:30-7:45</td><td>eating breakfast</td><td></td><td></td><td></td></tr></table>
	Record activities for a one-day period and locate personal activity level on an activity continuum. Discuss the implications of activity levels.	See Teaching Aids for energy expenditure activities. If students have difficulty placing themselves on the continuum, have them describe their activity patterns in writing.
3.3 Know the major causes of overweight and underweight.	Identify the two major lifestyles behavior that influence body weight.	Explain that eating and exercising are the two most important influences on body weight.
	List reasons for becoming overweight and underweight.	Examples of reasons for overweight: . loss of touch with inner signals and cues . ignoring or overriding signals to stop eating ("satiety" center in hypothalamus signals us to stop eating; "feeding" center in hypothalamus makes us feel hungry) . eating in response to appetite rather than hunger (hunger is a body need for food) . greater energy intake than energy output (activities)

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. abundant food supply . family food and exercise patterns . too little exercise
	See a film on weight control and answer film study questions.	Design study questions prior to showing the film.
3.4 Identify the effect of foods and exercise on total well-being.	List examples of ways that food and exercise affect total well-being.	Review with the class how food affects the five dimensions of well-being. . Physical - growth, appearance, body function, body maintenance, hunger . Psychological - mental alertness, concentration, efficiency, nervous and emotional control . Social - festive occasions, celebrations, friendship . Cultural - traditions, customs, friendship, family ethnicity . Spiritual - value, aesthetics, attitudes, religious celebration Review how regular physical activity: . utilizes calories so they are not stored as fat . increases alertness . reduces stress and tension . improves heart-lung efficiency . improves tone and efficiency of the heart . increases strength, endurance, and flexibility

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Explain that for optimum health, growth, and energy, the body must obtain necessary nutrients, adequate exercise and rest.
3.5 Justify reasons to control weight.	Make a list of reasons for controlling weight and discuss the importance of each to well-being.	Brainstorm for a list of reasons. For example: . appearance . self-worth . health risks (heart) . problems associated with overweight and underweight . lack of energy . nutritional deficiencies . growth problems . poor concentration and study skills . illness (physical, social-emotional)
	Discuss overweight and underweight in relation to effects on physical and social-emotional well-being.	Discuss how obese people: . suffer harassment and discrimination . have lowered self-image . may have anxiety problems due to exclusion from social events, athletic activities, job discrimination These contribute to decreased social-emotional well-being. Physical effects of obesity are: . impaired coordination and flexibility . overworked heart . impaired blood vessels . shortened life

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Physical effects of underweight are: . lack of energy, endurance, strength and flexibility . lack of reserve body energy for emergencies
4.0 Food Appreciation This concept has been developed in earlier grades. No activities have been designed from grade five to grade nine for this section.		
5.0 Promoting Positive Lifestyle Practices Students should be able to:		
5.1 Assess body fatness.	Analyze body fatness using a mirror or pinch test.	Mirror Test - Have students observe their body shapes at home, naked in front of full-length mirror. Pinch Test - Have students try pinching their stomachs, backs of arms, or backs while standing. An inch or more fat may indicate excess.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
5.2 Know the importance of practicing weight control.	Discuss the pros and cons of overweight and underweight.	Points for students to consider if weight gain is a problem: . seek and comply with professional advice . increase activity . reduce food intake to minimum servings from Canada's Food Guide . select lower calorie foods
5.3 Propose goals to improve nutrition lifestyle and health.	State nutrition goals to improve lifestyle and health.	See grade seven Teacher Notes re stating nutrition goals. Have students consider the following points and recommendations in formulation of goals: . It is necessary to balance what you eat (energy intake) with what you do (energy output) to achieve weight control. . Weight can be lost or gained when energy obtained from food is less or greater than the body's need for energy. Nutrition recommendations for Canadians: . the consumption of a nutritionally adequate diet, as outlined in Canada's Food Guide . a reduction in calories from fat to 35% of total calories; the inclusion of a source of poly-unsaturated fatty acid (linoleic acid) in the diet

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. the consumption of a diet which emphasizes whole grain products, fruits and vegetables and minimizes alcohol, salt and refined sugars . the prevention and control of obesity through reducing excess consumption of calories and increasing physical activity
5.4 Propose a plan to improve nutrition lifestyle and health.	Select a nutrition habit you would like to improve. Justify. Propose a plan of action for improvement.	Have the students use the decision-making process to develop a plan of action. The steps are: . State the problem. . List alternatives. . Discuss pros and cons. . Select the best alternative. . Make a plan. Propose personal goals and carry out the plan for a period of time. . Evaluate.

dental health

DENTAL HEALTH

SUB-GOAL: To develop proficiency in applying dental health concepts, attitudes and skills that maintain and promote dental well-being.

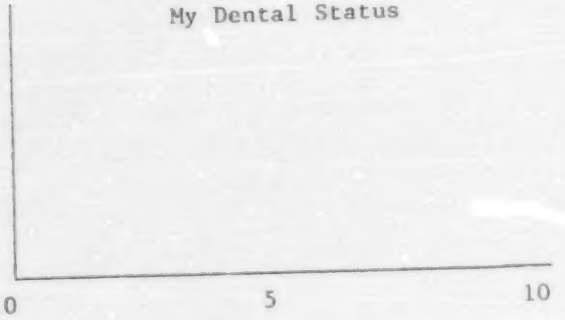
OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
1.0 Structure and Function Students should be able to:		
1.1 Know the structure and function of a tooth.	Draw, label and describe each structure of a tooth. Construct a crossword puzzle using correctly spelled dental terms.	Review or pretest students on the structure and function of a tooth, noting the four major types of teeth, their positions and general purposes.
2.0 Environmental Factors Students should be able to:		
2.1 Analyze the progression of decay.	Draw a series of diagrams illustrating each step of the decay process in a tooth. Set up several experiments in the classroom to demonstrate how decay occurs; compare and contrast to decay in teeth.	Discuss how decay affects the structures of a tooth. See: "Caries and Restoration," Learning About Your Oral Health (American Dental Association, 1980). Have students perform the following experiments: Experiment I Bring an apple to class. Poke a hole in it with a nail or pencil and set the apple aside. After three or four days, cut the apple open and observe the

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		decay. Compare this to the beginning of tooth decay. Experiment II Hard boil an egg. Place it in a glass of vinegar. Compare the egg to a tooth and the vinegar to acid in the mouth if plaque and food debris are left on the teeth. Examine the shell after the egg has been in the vinegar 24 hours. Experiment III Obtain extracted teeth from a dentist to show decay. Extracted teeth placed in saliva, soft drinks, water, or vinegar and allowed to sit for several weeks, will provide data on different environmental conditions and decay.
	Observe and collect data on how decay occurs in a tooth under varied conditions.	
2.2 Know the consequences of dental disease.	Identify dental diseases that may result from neglect, and describe the effects on the individual's health.	Explain that tooth disease and decay is the leading cause of morbidity in North America. Adolescents have the greatest rate of dental caries of all age groups. See Teaching Aids for background on the following dental diseases: . dental caries . extractions due to caries . gingivitis . periodontal disease due to neglected gingivitis

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Consequences of dental diseases may be: . deterioration of general health - infection may spread to other parts of the body (mouth, neck and tissues of kidney or heart) if neglected . cost . appearance . time lost from school or job Film: "Periodontal Disease" (Department of Health Film Library).
	Define types of caries.	Explain that the term "caries" includes: . cavities . fillings . extractions . crowns . caps . dentures . bridges
	Investigate the incidence of caries within your family.	Have the students do a survey of their family. Identify the age of each member and the incidence of caries. Be sensitive here as this activity may not be appropriate for some students and families. With the class, draw conclusions about the following consequences of dental disease: . cost . time

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. pain . effect on social, emotional and physical health . appearance . inconvenience
	Write an essay about a dental disease, describing causes, consequences and possible preventive measures.	
2.3 Know the appropriate prevention and treatment of a dental injury.	Discuss prevention and treatment for a given dental accident--tooth knocked out, tooth fractured, lip injury.	Describe a situation in which: . a student is hit in the mouth with a baseball bat and a dental injury results . a younger child hits the dash of a car when unrestrained and a dental injury results
	Discuss and demonstrate the correct use of sports equipment that protects the mouth and teeth.	
	Go on a "hazard" hunt inside the school to identify hazards. Describe how to reduce or prevent risk behavior around each hazard.	See grade seven Teacher Notes for appropriate prevention and treatment in the event of dental accidents.

OBJECTIVES	SUGGESTED STJDENT ACTIVITIES	TEACHER NOTES
	Write a report on how to handle a dental emergency or accident.	
2.4 Identify appropriate school snack foods.	Research a list of dentally safe and nutritious snack foods for a school vending machine, party or snack shop.	Have several students form a committee to look into dentally safe and nutritious food for a school vending machine or snack shop. Have them find out costs and availability of these foods. Suggested snacks include: . non-sweetened juices . fresh fruits and vegetables . nuts . popcorn For a list of dentally safe and nutritious snacks: "Snack Signals," Illustration #6, Dental Health A Teacher's Guide K-12 (Health and Welfare Canada, 1981).
3.0 Promoting Positive Lifestyle Practices Students should be able to:		
3.1 Assess personal dental practices.	Rate the characteristics of the mouth, as well as personal dental practices and habits.	Have students devise a dental check list and rate themselves on: . oral characteristics . dental practices

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Review brushing and flossing skills, and evaluate by disclosing.	Have students review how to brush and floss. Have them bring dental products they use at home and, working in pairs, evaluate dental skills. Characteristics of dental products (brush, floss, paste) could be discussed and products rated according to dentally accepted criteria.
	Rate dental health status on a scale of one to ten. List factors that contribute to the rating and discuss.	
3.2 Identify the roles of dental professionals.	Describe a routine dental examination.	Stress the benefits of visiting the dentist as regularly as recommended. During a checkup, the dentist may do one or all of the following, according to need: . observe teeth for cavities and alignment . observe health of the gums . repair a cavity . x-ray . remove calculus and clean the teeth . instruct on diet, brushing and flossing, dental products

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Describe the careers and functions of a dentist, orthodontist, dental nurse, and dental hygienist. Describe types of restoration and health instruction methods.	For information on dental careers see: Section 31, "Occupations in Medicine and Health," Careers Manitoba, Vol. 2 (Employment and Immigration Canada, 1981). Invite a dental professional to class. Have students find out about: . root canals . caps . fillings . dentures, bridges . braces . scaling . polishing . fluoride treatment . dental health education . home care practices
3.3 Identify personal and family responsibility to promote and maintain good oral health.	List at least five personal practices that promote and maintain good dental health during adolescence. List at least five parental practices that promote good dental health during infancy and childhood.	Stress the importance of being responsible for personal and family health.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
3.4 Formulate short- and long-term goals to improve and maintain dental health.	State or write goal statements that promote and improve dental health.	Discuss the following concepts with the students: . A mature person sets goals. . A goal is something that you work toward continually. . A short-term goal is a goal you have for the next few months. . A long-term goal is something you are working for in the future years. Have students brainstorm for a list of short-term goal statements. Review factors that influence dental health positively and negatively. Have students discuss reasons to improve dental health, and propose long-term goals. Have the students complete these statements: . My long-range dental health goal is _____ _____ _____ . Three things I could do now to reach this goal are _____ _____ _____ . Information or skills I need are _____ _____ _____ . People who could help me reach this goal are _____ _____ _____

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. I am going to start working toward my goal by _____ _____ _____ _____ _____
3.5 Propose a plan of action to improve dental health.	Select a dental practice that needs improvement, and outline a plan of action for improvement.	Encourage students to write a report on improving personal dental health. Have them describe practices that need improvement, goals, and ways to modify practices. Encourage students to prepare a dental chart and record progress for a period of time. Have the students "take a look into the future." Ask: . Do you see yourself with false teeth, missing teeth, decayed teeth? . At what age will you probably have false teeth? . What would it be like to have false teeth?

safety

SAFETY

SUB-GOAL: To practice safety and survival procedures that promote individual and community well-being.

<table>
<tr><th>OBJECTIVES</th><th>SUGGESTED STUDENT ACTIVITIES</th><th>TEACHER NOTES</th></tr>
<tr><td>1.0 Safety in Environments

Students should be able to:

1.1 Identify accidents common to youth.</td><td>Conduct a classroom or school survey on accidents common to youth.

Analyze a personal accident noting cause and consequences. Suggest preventive measures.</td><td>Explain that the major cause of death in youth is accidents.

Explain that an accident is an unplanned event or act that may result in injury, property damage or death.

The survey could show types of common accidents and related causes. For example:
<table>
<tr><th>Types</th><th>Causes</th><th>Consequences</th></tr>
<tr><td>car accidents</td><td>not wearing seat belts; distractions; alcohol</td><td>injury, death</td></tr>
<tr><td>pedestrian</td><td>failure to look both ways even when the light is green</td><td>injury, death</td></tr>
<tr><td>drowning</td><td></td><td></td></tr>
<tr><td>falls</td><td></td><td></td></tr>
</table>
</td></tr>
</table>

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Analyze an accident reported in a newspaper or on TV, noting cause and consequences. Suggest ways to prevent the accident.	Some causes may be lack of knowledge, emotions, fatigue, showing off, false sense of security, dangerous environmental condition, or unsafe machinery.
1.2 Identify the costs of an accident.	Describe the costs of an accident.	Have the students consider these points: . time . energy . money . hospitalization . pain . grieving . lost production
1.3 Know safety rules and regulations that reduce or prevent accidents common to youth.	Research safety rules and regulations to reduce and/or prevent injury in a variety of locations.	Using the data from the survey, find out safety rules and/or regulations to prevent injury; for example, rules to prevent poisoning, drowning, falls, car accidents, fires. Research safety regulations at school or in the community. Discuss home safety rules.
1.4 Know rules to follow to exit safely from a burning building.	Discuss the rules to follow in exiting from a burning building.	With the students, discuss the following: . have a meeting spot . get out fast . crawl under smoke . close doors to prevent spread of smoke . call for help
	Make a sketch of your house or apartment and plan two possible exits from each room in the event of a fire.	

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
1.5 Distinguish between the cost-effectiveness of different types of safety equipment.	Within a specific safety area, collect and chart the features and cost-effectiveness of one piece of safety equipment.	Examples are:
1.6 Analyze electrical accidents.	Analyze a case study or a situation involving an electrical accident, outlining hazards, risky behavior and consequences. Propose safety rules and behavior to prevent or reduce electrical accidents.	

Area	Brand	Features	Cost	Effectiveness pros	Effectiveness cons
Sports . helmet					
Fire Safety . smoke . detectors . extinguisher					
Vehicle Safety . infant car seat . child car seat					

Situation Involving	Hazard	Risk	Consequences	Prevention
high tension wires		(behavior)		(safety behavior and rules)
home electrical accident				

<table>
<tr><th>OBJECTIVES</th><th>SUGGESTED STUDENT ACTIVITIES</th><th>TEACHER NOTES</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Situation Involving</th><th>Hazard</th><th>Risk</th><th>Consequences</th><th>Prevention</th></tr>
<tr><td>electrical toys or equipment</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>1.7 Analyze common water accidents.</td><td>Analyze a type of water accident, outlining hazards, risky behavior, and consequences. Propose safety rules and behavior to prevent or reduce the accident.</td><td>
<table>
<tr><th>Water Accidents</th><th>Hazard</th><th>Risk</th><th>Consequences</th><th>Prevention</th></tr>
<tr><td>home

pools
beaches
lakes
ponds
rivers
boating
fishing</td><td></td><td>(behavior)</td><td></td><td>(safety behavior and rules)</td></tr>
</table>
</td></tr>
<tr><td>1.8 Identify safety procedures to follow in dangerous environmental conditions.</td><td>Describe hypothermia, frostbite, heat exhaustion and heat stroke. Outline safety procedures.</td><td>Because Manitoba has extreme weather conditions, several types of accidents, related to the environment and risky behavior, can occur.</td></tr>
</table>

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
1.9 Know emergency procedures to follow in the event of a heart attack.	State early warnings of a heart attack and describe emergency procedures to follow.	Stress the following heart attack early warnings: . pain . difficulty breathing . palpitations . nausea . vomiting . cold sweat . paleness . weakness . anxiety Discuss the following emergency procedures: . Help the victim find the least painful position. . Call ambulance or local rescue service and family doctor immediately. . Comfort the victim. . Take the victim to the hospital if emergency service is not available. . Take trained help with you. . During the drive to the hospital, give emergency CPR if needed and if trained. . Carry the victim to the emergency room on arrival.
2.0 Promoting Positive Lifestyle Practices Students should be able to:		
2.1 Assess personal safety lifestyle.	Describe, in writing, personal safety behavior.	

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Complete a safety inventory and rate self.	See Teaching Aids for inventory.
2.2 Know the importance of complying with safety rules and regulations.	Describe the pros and cons of following safety rules and regulations in a variety of situations.	
2.3 Design a plan of action to promote a safety lifestyle.	Select a safety behavior or safety areas that need improvement and design and implement a plan of action.	Have the students use the following procedure: . Identify the safety goal. . Research the topic area (i.e., tornados, swimming, heart attack). . List alternative safety behavior to follow. . Describe the pros and cons of each safety behavior (verify). . Select the best behavior to follow. . Prepare a plan of action. . List goal statements and record practices for a period of time. . Evaluate.

environmental health

ENVIRONMENTAL HEALTH

SUB-GOAL: To understand the importance of making responsible lifestyle decisions regarding disease, environmental factors and community health resources.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
1.0 Environmental Factors Students should be able to: 1.1 Identify community health agencies and services and their functions.	Investigate the functions of a variety of community health agencies. Prepare a community handbook describing the work of governmental, non-governmental, and private health agencies in the local community.	Explain that a government health agency or service is funded by taxation whereas a non-governmental agency or service is funded by public drives and donations; private organizations bill the public for service. Some examples of non-governmental agencies and/or services are: . Manitoba Heart Foundation . Victorian Order of Nurses . Multiple Sclerosis Society . Canadian Cancer Society . Arthritis Society . Manitoba Lung Association . Canadian Diabetic Foundation . Planned Parenthood of Manitoba . Marketing Boards . Canadian Red Cross Society

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		Examples of government-funded agencies are: . hospitals . health units . nursing stations . outpost hospitals Some private services are: . dental clinics . optometrists . some medical specialties
2.0 Disease Prevention Students should be able to:		
2.1 Recognize the changing patterns of mortality in Canada during the twentieth century.	Examine mortality graphs for the twentieth century and note changes and patterns. Propose significant factors that contribute to changing patterns. Prepare a graph or poster showing the main causes of death of Canadians for various groups.	See Teaching Aids for tables of changing patterns of mortality.
2.2 Know the nature of common chronic or non-communicable diseases.	List common chronic diseases of youth. Prepare a report about one chronic disease identifying environmental	Distinguish between communicable, non-communicable, and chronic diseases. Make a class list of common chronic diseases.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	hazards, risk factors, effects, treatment, and prevention.	Examples are: . cardiovascular disease (heart attack, stroke, arteriosclerosis, atherosclerosis, hypertension) . cancer . emphysema and other lung diseases (asthma and bronchitis) . epilepsy . muscular dystrophy . multiple sclerosis . cerebral palsy . arthritis and rheumatism . scoliosis . diabetes . allergies
	Invite a representative from a health agency to speak to the class about the nature of a specific disease.	
2.3 Know the nature of common communicable diseases of youth.	Research the cause, effect, treatment and prevention of a common communicable disease of youth.	Make a class list of common communicable diseases of youth in Manitoba and/or Canada. The local health region and Department of Health keeps statistics on communicable diseases. Encourage students to consider the importance of keeping immunization up to date for life.
2.4 Know the nature of common skin disorders of youth.	Label or study a diagram of the skin and describe one or more skin disorders as to cause, prevention and treatment.	Common skin disorders of youth include pimples, blackheads, whiteheads, acne, scabies, ringworm, impetigo, and lice.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		A serious eye disorder called conjunctivitis can occur when girls share cosmetics; e.g., eyeliner, mascara. Stress that such behavior places the individual at risk. It is important for students to consider personal health behavior that might spread disease, and suggest ways to improve skin health. Examples are: use only personal grooming aids and cosmetics, wash skin regularly to remove excess oil, drink plenty of water daily, follow Canada's Food Guide, seek medical help for skin problems and comply with directions.
2.5 Know how blood circulates throughout the body. (OPTIONAL)	Review the flow of blood throughout the heart, lungs and body, identifying and defining key terminology. Graphically illustrate the flow of blood throughout the heart, lungs and body.	
2.6 Identify major pulse points of the body. (OPTIONAL)	On a diagram, locate seven major pulse points of the body.	Seven major pulse points are: . radial (base of thumb) . carotid (neck) . apical (heart) . femoral (groin) . temporal (front of ear on cheek bone) . brachial (inner elbow) . pedal (inner ankle)

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		See Teaching Aids for a diagram of pulse points and directions on how to take a pulse correctly. Using the carotid, radial or brachial pulse point, demonstrate how to locate and measure a pulse.
2.7 Demonstrate changes in heart rate. (OPTIONAL)	Locate, count and graph heart rate at rest.	Have students work in pairs and practice taking pulse on each other, at rest, for 15 seconds. Multiply the count by four to determine heart rate for a minute.
	Prepare personal and class graphs to illustrate the changes in heart rate as reflected by the pulse following a variety of activities.	Assign small groups to determine changes in heart rate after these exercises: . sitting for one minute . standing for one minute . running on the spot for one minute . resting standing up for one minute, after three and five minutes . resting sitting down for one minute, after three minutes Review by discussing the heart's ability to increase its rate as work increases and then recover to resting position.
2.8 Recognize types of circulatory diseases.	Differentiate between heart attack, stroke, high blood pressure and atherosclerosis.	Have students provide a definition of each disease and a brief description, graphically or in writing.
2.9 Identify the risk factors associated with heart disease.	List and explain the nine risk factors associated with heart disease.	Use this anacronym to associate the nine risk factors:

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		How — high blood pressure * Come — cholesterol* Some — smoking* Die — diabetes How — heredity Many — male gender Shall— stress Live — lack of exercise On — obesity *the three major risk factors
	Differentiate between preventable and non-preventable risk factors associated with heart disease.	Have students study the above list and select those risk factors associated with the development of atherosclerosis and lifestyle choices. Those lifestyle choices that are preventable can modify the process of atherosclerosis.
2.10 Know the signals of a heart attack and a stroke.	Describe the early warning signals of a heart attack and compare it to those of a stroke.	The early warning signals of a heart attack are: . pain in center of chest (crushing, pressure, squeezing) . four radiating areas of pain . accompanying signals (sweating, shortness of breath, pain, denial, nausea, weakness)
2.11 Know how to respond in a heart attack emergency.	Discuss the need for getting help in the event of a heart attack and outline emergency measures to follow.	The main point is to prevent cardiac arrest by early intervention. A person who presents signals of a heart attack should be seen by a doctor as soon as possible. Examples of emergency measures can include:

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
		. check the victim (conscious, breathing, pulse); if conscious, reassure and place in comfortable position, get description of complaints . send someone for an ambulance; stay with the victim . describe information to ambulance center - location of victim - phone number - type of accident - victim's condition - best access route . have someone meet ambulance and give directions . have elevator ready if required . remain with victim, answer questions, give assistance
3.0 Promoting Positive Lifestyle Practices Students should be able to:		
3.1 Assess personal risk factors related to heart health.	Answer a questionnaire on heart health and identify changeable and unchangeable risk factors.	See risks profiles in Teaching Aids.
3.2 Recognize the importance of practicing heart health promotion.	Discuss the need for getting help in a heart attack emergency.	Review objective 2.11. Invite a trained CPR instructor to class to demonstrate CPR as a lifesaving procedure, its importance and ways to get help.

OBJECTIVES	SUGGESTED STUDENT ACTIVITIES	TEACHER NOTES
	Discuss the consequences of practicing behavior that places the individual at risk.	
3.3 Demonstrate personal commitment to improve heart health.	Write goal statements to improve heart health and carry them out.	Have groups of students discuss behavioral and environmental influences related to heart health choices. For each factor, write several goal statements that students are willing to modify to improve heart health. Examples are: . "I will eat unsalted peanuts rather than salted potato chips." . "I will not smoke." . "I will eat less fatty foods and snacks."
	Design a plan for use in a life-threatening situation at home, at school or in the community.	Using the decision-making process, outline a plan to promote heart health. Suggest that students use the following steps: . State the problem. . List alternatives. . Discuss pros and cons of each alternative. . Select the best alternative. . Outline a plan. State goals or steps to follow. Suggestions for the plan might include: - state how to get assistance--local resuce numbers, local emergency numbers (fire department, ambulance, hospital) - give rules to follow in the event of an attack - formulate a school rescue-assistance plan - familiarize staff and students with plan . Try out the plan. . Evaluate.